

CLIMATOLOGICAL DATA FOR APRIL, 1913.

DISTRICT NO. 11, CALIFORNIA.

Prof. ALEXANDER G. McADIE, District Editor.

GENERAL SUMMARY.

April, 1913, was both cold and dry. It was not as cold as April, 1912, but much drier than that month. From an agricultural standpoint conditions while not unfavorable might have been better, especially in the matter of rainfall. The rainfall was below the normal, and while much larger than the April falls from 1907 to 1910, failed to meet expectations, since the winter and early spring months had been comparatively dry, and it was hoped that the rains of April would mark the end of the period of deficient rainfall. The absence of any heavy rainfall was therefore more noticeable. During the preceding year a long dry period during winter had caused considerable apprehension, and it was only because of the good rains in the spring months, especially April, that bountiful harvests were secured and the operation of power, mining, and irrigation work assured.

The month began with a pressure distribution favoring unsettled weather. Light showers occurred in various parts of the State on the 1st, 2d, and 3d. On the 4th a moderate depression on the northern coast caused rain in the northern counties; but although the skies were for a time threatening there was little if any rain in the central and southern counties. A heavy rain at this time would have been of the greatest advantage to the State as a whole. During the first decade there was a tendency for a quick return to north winds after the passage of each depression. During the second decade, while there were numerous depressions on the northern coast, their general path was north of California. Secondary lows developed over Nevada, causing for the most part quick changes in temperature throughout the Great Basin and unsettled weather in the Sierra Nevada and the western foothills of this range. Such a disturbance was the one of April 14, which caused a light fall of snow in the mountains and thunderstorms in the San Joaquin Valley. Again on April 17-18 unsettled conditions prevailed.

Beginning April 21 the entire character of the pressure distribution over the Pacific slope changed and for a period of about one week the surface winds were north, the weather clear, afternoon temperatures high, morning temperatures low, and more or less frost in exposed places. A good illustration of the foehn effect occurred on April 23, 24, and 25. The air flowing southward and southwestward crossing various mountain ranges and losing much of its load of vapor, descended into the valleys of California, gaining heat by compression, and owing to its comparative dryness was able to absorb moisture rapidly from soil and vegetation. On April 24 a maximum temperature of 85° occurred at San Francisco, while in the valleys afternoon temperatures were as high as 90° and

the percentage of saturation about 30. The effect of this stream of warm dry surface air is shown in the rapid melting of the snow in the mountains. At the close of the month conditions were somewhat similar to those of the first decade, but less marked. There were showers on the 29th and 30th in the northern counties.

There were no unusually high winds. Along the coast there was more fog than usual and yet there was more sunshine, the fog lying very low and the sunshine recorders being above the fog.

At the close of the month the outlook for an abundant supply of water during the summer months was not encouraging.

TEMPERATURE.

The temperature for the State was 2° below the normal. The following table gives the mean temperature for each February during the time for which records have been kept:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	°F.	°F.		°F.	°F.
1897.....	60.6	+3.6	1906.....	56.3	-0.7
1898.....	60.9	+3.9	1907.....	58.2	+1.2
1899.....	58.1	+1.1	1908.....	58.4	+1.4
1900.....	53.9	-3.1	1909.....	57.6	+0.6
1901.....	55.8	-1.2	1910.....	59.8	+2.8
1902.....	56.2	-0.8	1911.....	54.2	-2.8
1903.....	54.8	-2.2	1912.....	51.9	-5.1
1904.....	57.2	+0.2	1913.....	54.9	-2.1
1905.....	57.2	+0.2			

The highest temperature recorded at any station was 105° at Heber on the 27th. This was 11° higher than the highest temperature during April, 1912, which occurred at the same place. The lowest temperature was 24° at Tamarack on the 2d. This was 16° higher than the lowest temperature of April, 1912.

The average precipitation for California for April, with departures from the normal, is as follows:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	Inches.	Inches.		Inches.	Inches.
1897.....	0.51	-1.28	1906.....	1.68	-0.11
1898.....	0.41	-1.38	1907.....	1.11	-0.68
1899.....	0.60	-1.19	1908.....	0.67	-1.12
1900.....	2.14	+0.35	1909.....	0.12	-1.67
1901.....	2.16	+0.37	1910.....	0.62	-1.17
1902.....	1.88	+0.09	1911.....	1.93	+0.14
1903.....	1.28	-0.51	1912.....	3.07	+1.28
1904.....	2.18	+0.39	1913.....	1.44	-0.35
1905.....	1.18	-0.61			

The greatest monthly precipitation was 7.88 inches, at Towle. Ten stations reported no rain during the month.

SNOWFALL IN THE MOUNTAINS.

The month was one of light snowfall in the mountains of California. In certain portions of the Sierra Nevada the precipitation was slightly above the normal; but in the range as a whole, and likewise in the Sierra Madre and the Coast Range, both rain and snow were deficient. The season as a whole has been one of light snowfall. The depth and area of the snow cover were less than at the corresponding date last year and also 1911.

The snow that now remains at the high elevations will melt rapidly, and there is every likelihood that the season will be an early one and most of the passes open and available for travel by the beginning of June. The waterfalls and mountain streams will show a marked decrease in volume before the middle of June.

SPECIAL COMPARATIVE REPORTS.

Summit.—The following table shows depth of snow on ground at Summit, Placer County, on several dates in April for a number of years:

	Apr. 1.	Apr. 15.	Apr. 30.
	Inches.	Inches.	Inches.
1907.....	240	165	117
1908.....	50	31	23
1909.....	188	158	129
1910.....	65	32	12
1911.....	135	145	96
1912.....	50	30	32
1913.....	50	41	24

SUNSHINE.

The following table gives the total hours of sunshine and percentages of possible:

Stations.	Hours.	Per cent of possible.	Stations.	Hours.	Per cent of possible.
Eureka.....	231	58	Sacramento.....	317	80
Fresno.....	333	81	San Diego.....	322	83
Los Angeles.....	309	79	San Francisco.....	292	74
Mount Tamalpais.....	292	74	San Jose.....	300	76
Red Bluff.....	263	66	San Luis Obispo.....	267	68

There was more sunshine during the current April than during April last year.

NOTES ON THE RIVERS OF THE SACRAMENTO AND LOWER SAN JOAQUIN WATERSHEDS DURING APRIL, 1913.

By N. R. TAYLOR, Local Forecaster.

Sacramento watershed.—Precipitation throughout this watershed was below the normal for the month. It occurred, for the most part, as scattered showers during the first and second decades, with some snow in the higher levels.

Notwithstanding the shortage of precipitation all streams in the drainage basin of the Sacramento Valley rose as a result of melting snow, and their average stages were higher than during any month since the spring of 1911. They were, however, below the stages that are usually maintained during the month in question and, in many cases, were the lowest on record for April, except that of 1912.

The average stage at Red Bluff on the Sacramento River was 0.6 foot below the 15-year average and 1.8 feet

above the lowest previous average for the month. At Colusa the Sacramento averaged 11.2 feet, which is 2.4 feet below the average of the past 7 years, and 4.2 feet above the lowest on record for the month. The Sacramento at Knights Landing averaged 4 feet below the normal of the past 15 years, and 4.3 feet above the lowest for the mouth. At Sacramento City the river was 4.4 feet below the average of the past 20 years and 4.3 feet above the previous low-water average for the month.

In the Feather-Yuba watersheds all watercourses rose slowly during the greater part of the month, and while they were from 1 foot to nearly 3 feet above the stages during the corresponding month in 1912 they were much below the usual April stages.

The American River carried more water than for any month since that of June, 1911. It was, however, about 1 foot below the usual April stage.

Lower San Joaquin watershed.—There was much less than the usual amount of precipitation in this watershed, but all streams rose slowly and steadily as a result of melting snow, except the Calaveras. They were, however, below the usual April stages, especially in the lower San Joaquin itself, which was nearly 8 feet below the 15-year normal.

NOTES ON STREAMS OF THE UPPER SAN JOAQUIN WATERSHED.

By W. E. BONNETT, Local Forecaster.

Except in the lower reaches of the upper San Joaquin itself, the stages of streams of the upper San Joaquin drainage area were slightly higher than in April, 1912, but they were everywhere much lower than the average April stages. Fairly heavy rains on the 13th and 14th had no appreciable effect on the flow at any point, and only during the closing week of the month were substantial rises recorded. The maximum stages at the several stations occurred on the 27th and 28th following the abnormally warm weather of the 24th, 25th, and 26th.

At Merced Falls the average monthly stage was 1.2 feet, and the range from 0.9 foot on the 10th to 1.7 feet on the 27th. The 7-year average stage at this point is 1.6 feet. At Friant on the San Joaquin the mean stage was 0.5 foot as compared with a 7-year average of 2.1 feet for April at that point. Daily stages ranged from 0.1 foot on the 9th to 1.3 feet on the 27th. Firebaugh had an average stage of -0.2 foot as compared with a 7-year average of 4.6 feet. At this station the daily stages ranged from -0.9 on the 3d to 3 feet on the 28th. The average stage in the Kings River at Piedra was 6.7 feet as compared with 5.8 in April, 1912, and an approximate average of 7.8 feet for a 10-year period. Here the daily stages ranged from 5.6 feet on the 8th to 8.7 feet on the 27th.

Shortage of rainfall during the spring months created an early demand for irrigation water and the available supply was seriously inadequate. At the close of the month some ditch systems had received no water at all.

FROST STUDIES—DETERMINING PROBABLE MINIMUM TEMPERATURES.

By Prof. A. G. MCADIE.

Loss of heat occurs in three ways—first, by radiation; second, by convection; and third, by conduction. In frost investigations the loss by conduction is unimportant and may be neglected. In fact the soil during night hours, while losing heat in other ways, gains heat by slow conduction through the earth. Air, however, is such a

TABLE 1.—Climatological data for April, 1913. District No. 11, California.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
<i>Oregon.</i>																					
Klamath Agency.	Klamath.	4,169	4	42.2	-	68	25	24	7	35	0.60	-	0.40	2.0	2	21	6	3	w. se. s.	N. D. Ginsbach.	
Klamath Falls.	do.	4,100	23	43.7	-2.8	73	25	20	6	38	1.05	+ 0.15	0.40	1.5	7	7	13	10	Augusta J. Hayden.		
Lakeview.	Lake.	4,825	29	41.0	-3.0	74	25	18	6	38	0.69	- 0.45	0.20	3.7	11	8	11	11	C. C. Gott.		
Merrill.	Klamath.	4,070	6	42.6	-	75	25	20	6	49	1.60	-	0.55	-	8	13	12	5	U. S. Reclamation Service.		
Yonma.	do.	4,146	5	39.3	-	74	25	18	6†	46	1.17	-	0.24	2.5	9	2	21	7	Ward Rueck.		
<i>California.</i>																					
Alturas.	Modoc.	4,400	9	45.4	-	76	25	18	30	45	2.08	-	0.50	9.0	11	11	15	4	w. e. sw. s.	Prof. C. B. Towle.	
Angiola.	Tulare.	208	13	63.4	+ 4.8	95	11	45	2†	43	0.37	- 0.13	0.37	0	1	25	0	5	n.	Santa Fe Co.	
Antioch **.	Contra Costa.	46	34	67.2	+ 7.5	92	21	42	2	38	0.07	- 0.75	0.07	0	1	27	0	3	e.	Southern Pacific Co.	
Apt. s **.	Santa Cruz.	102	28	55.1	+ 0.2	70	22†	36	6	38	0.38	- 1.69	0.08	0	5	17	2	11	sw.	Do.	
Arrowhead Springs.	San Bernardino.	2,000	4	50.9	-	89	26	36	14	37	0.96	-	0.55	-	6	19	11	0	Dr. E. J. Erickson.		
Aurum.	Placer.	1,360	42	56.2	- 0.3	86	24	35	27†	45	1.43	- 1.59	0.76	0	4	19	2	9	ne.	Southern Pacific Co.	
Avalon.	Los Angeles.	30	3	56.4	-	71	11	47	7†	21	0.10	-	0.05	0	4	25	4	1	w.	T. S. Manning.	
Azusa.	do.	540	11	59.0	- 1.1	95	26	32	15	53	0.63	- 0.37	0.37	0	3	21	4	5	sw.	A. P. Griffith.	
Bagdad.	San Bernardino.	784	10	74.0	+ 1.3	98	28	52	11	31	0.00	-	0.06	0.00	0	0	0	0	Do.	Santa Fe Co.	
Bakersfield.	Kern.	404	24	64.0	+ 0.5	98	26	36	3	52	T.	- 0.32	T.	0	0	27	0	3	w.	E. L. White.	
Barstow.	San Bernardino.	2,105	10	61.4	- 0.8	88	26	35	10	46	0.00	-	0.07	0.00	0	0	29	0	1	sw.	State University.
Berkeley.	Alameda.	317	26	56.0	+ 1.3	87	24	39	6†	39	0.57	- 1.01	0.20	0	5	11	15	4	w.	Union Sugar Co.	
Beteravia.	Santa Barbara.	54.4	-	78	25	32	7†	38	0.48	-	0.19	0	3	20	10	0	0	s.	Southern Pacific Co.		
Biggs **.	Butte.	98	14	56.0	- 3.4	94	25	38	7	..	1.32	+ 0.33	0.55	0	4	17	6	7	Do.	Paul E. Lodge.	
Bishop.	Inyo.	4,450	18	37.8	-	61	25†	17	6†	31	0.50	-	0.30	5.0	2	25	0	5	Do.	Victor Hope.	
Bishop Creek.	do.	8,500	3	37.8	-	61	25†	17	6†	31	0.50	-	0.30	5.0	2	25	0	5	Do.	Southern Pacific Co.	
Blocksburg.	Humboldt.	1,700	7	..	-	..	-	-	-	-	-	-	-	-	-	-	-	-	Do.	C. L. Suits.	
Blue Canon.	Placer.	4,695	14	46.0	- 0.9	72	25	27	15†	35	5.87	+ 2.33	1.11	22.5	12	18	2	10	Do.	A. J. Haun.	
Blythe.	Riverside.	268	4	66.5	-	99	26†	33	4	53	T.	0	0	24	3	3	3	0	Do.	M. D. Witter.	
Branscomb.	Mendocino.	2,000	13	49.8	0.0	87	24	25	28	49	6.99	+ 2.86	1.76	0	12	10	7	13	Do.	Mrs. M. D. Chambers.	
Brawley.	Imperial.	-105	4	67.8	-	98	26†	42	4†	45	0.15	-	0.15	-	0	1	23	7	0	Do.	Dr. W. L. Shawk.
Burney.	Shasta.	3,300	3	46.0	-	80	24	21	7†	50	1.73	-	0.64	1.1	7	9	9	14	Do.	J. E. Peck.	
Cahuita.	Riverside.	3,600	2	48.4	-	82	22	18†	30	46	0.57	-	0.20	0	4	22	2	6	Do.	Southern Pacific Co.	
Calexico.	Imperial.	0	8	..	-	..	-	-	-	-	-	-	-	-	-	-	-	-	Do.	Do.	
Caliente **.	Kern.	1,200	37	54.6	- 6.3	90	25	34	15	..	1.98	- 0.82	1.00	0	2	21	1	8	w.	F. M. Righter.	
Calistoga **.	Napa.	363	41	56.7	- 1.1	95	25	30	30	41	0.22	- 0.74	0.11	0	3	18	4	8	nw.	Cal. Gas & Elec.	
Campbell.	Santa Clara.	217	16	55.6	+ 0.7	82	26	33	6†	41	0.22	-	0.41	2.88	3.0	8	22	0	sw.	T. H. Johnstone.	
Camptonville (near).	Yuba.	3,500	6	52.2	-	84	25	30	6†	36	4.89	-	0.86	-	2.0	12	14	5	n.	G. H. Stephenson.	
Cedarville.	Modoc.	4,675	19	45.5	- 0.7	76	25	22	30	38	1.24	+ 0.41	0.28	0	2	21	4	5	w.	O. I. Websterburg.	
Chico.	Butte.	189	43	57.4	- 4.2	86	24†	31	30	41	1.18	- 0.51	0.36	0	5	14	4	12	sw.	Southern Pacific Co.	
China Flat.	Humboldt.	600	4	55.1	-	90	24	32	28	46	3.72	-	1.08	-	0	12	9	10	w.	Do.	
Chino.	San Bernardino.	714	21	58.4	- 2.4	88	25	46	1	..	0.30	- 0.18	0.30	0	1	16	10	4	sw.	Southern Pacific Co.	
Cisco **.	Placer.	5,939	42	42.7 ²	+ 5.4	58.2	27	28	2	..	2.00	- 1.84	0.50	20.0	7	..	..	..	Do.	Do.
Claremont.	Los Angeles.	1,200	21	58.4	+ 0.6	92	26	32	15	41	0.25	- 0.48	0.13	0	4	20	7	3	w.	Prof. F. P. Brackett.	
Cloverdale.	Sonoma.	340	11	55.5	- 2.3	91	24	35	28†	45	2.04	+ 0.23	0.89	0	9	20	0	10	w.	John O. Ogle.	
Coalinga.	Fresno.	663	1	60.7	-	93	26†	33	30	45	0.65	-	0.50	0	2	21	4	5	w.	Union Oil Co.	
Colfax.	Placer.	3,421	42	51.8	- 2.5	81	23	31	14	42	1.48	- 2.68	1.12	0	3	18	2	10	sw.	Southern Pacific Co.	
Colusa.	Colusa.	60	10	59.2	+ 0.4	87	24	35	30	44	0.44	- 0.69	0.37	0	2	17	6	7	s.	C. D. McComish.	
Corming **.	Tehama.	277	27	62.7	+ 2.4	87	24	42	7	..	1.18	- 0.18	0.47	0	5	9	13	8	n.	Southern Pacific Co.	
Cuyamaca.	San Diego.	4,677	14	48.6	+ 3.0	76	26	29	14	34	0.93	- 0.17	0.29	0	4	23	3	4	w.	Cuyamaca Water Co.	
Davisville.	Yolo.	51	41	57.0	- 3.8	89	25	31	7†	50	0.77	- 0.45	0.30	0	5	20	9	1	n.	S. H. Beckett.	
Deer Creek.	Nevada.	3,700	6	44.4	-	75	24	30	30	41	4.88	-	0.98	13.0	11	16	3	11	w.	Cal. Gas & Elec.	
Del Monte.	Monterey.	25	2	57.5	-	80	25	42	15†	30	0.10	-	0.10	0	1	21	6	3	nw.	H. R. Warner.	
Delta.	Shasta.	1,138	28	55.2	- 1.6	86	27	39	1	40	4.70	- 0.77	1.35	0	10	12	0	18	s.	Southern Pacific Co.	
Demarle.	Stanislaus.	126	13	58.8	- 1.6	90	25	31	31	51	0.14	- 0.35	0.08	0	2	26	0	4	nw.	Santa Fe Co.	
De Sabla.	Butte.	2,500	9	60.6	-	80	24†	26	30	36	5.42	-	1.13	0	8	8	12	10	sw.	Cal. Gas & Elec. Co.	
Dobbins (near).	Yuba.	1,850	9	57.6	-	88	23	34	30	32	2.51	-	0.65	T.	8	9	17	4	s.	Do.	
Dovnleville.	Sierra.	3,150	2	49.0	-	82	24†	24	30	48	5.47	-	1.25	3.5	13	12	7	11	s.	J. T. Mason.	
Dudley.	Kings.	595	1	62.0	-	92	24†	35	30	42	0.10	-	0.10	0	1	18	5	7	n.	Union Oil Co.	
Dudleys (near).	Mariposa.	3,000	4	47.8	-	78	25	24	30	40	1.91	-	1.08	2.0	8	11	6	n.	W. H. Dudley.		
Dunlap (near).	Fresno.	2,800	1	..	-	..	-	-	-	-	-	-	-	-	-	-	-	-	Do.	U. S. Forest Service.	
Dunnigan **.	Yolo.	65	36	68.0	+ 5.6	90	25	50	14	..	0.54	- 0.80	0.25	0	4	21	3	6	n.	Southern Pacific Co.	
Dunsmaur **.	Siskiyou.	2,235	24	49.0	+ 4.4	85	25	27	6	..	3.10	- 0.50	1.26	0	10	12	0	18	s.	R. W. Durham.	
Durham.	Butte.	160	18	56.7	- 1.3	85	24†	29	30	43	1.72	- 0.01	0.96	0	3	14	14	2	s.	H. H. Kessler.	
El Cajon.	San Diego.	482	14	59.0	- 0.7	94	26	36	19	52	0.19	- 0.44	0.08	0	3	27	3	0	sw.	Cal. Gas & Elec. Co.	
Electra.	Amador.	5,230	9	57.8	-	86	26	36	30	36	1.77	-	0.72	1.58	24.0	10	18	0	12	s.	Southern Pacific Co.
Emigrant Gap.	Placer.	5,230	39	44.0	+ 1.5	70	25	28	20	28	2.87	-	1.58	1.20	0	7	22	5	3	sw.	A. R. Moon.
Escondido.	San Diego.	657	19	58.9	+ 0.5	92	26	34	15	51	0.70	- 0.15	0.32	0	3	11	18	1	w.	U. S. Weather Bureau.	
Eureka.	Humboldt.	64	27	49.3	- 0.2	68	24	37	7	24	3.41	- 0.87	1.43	0	1						

TABLE 1.—Climatological data for April, 1913. District No. 11—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeted.	Number of rainy days 0.01 inch or more.	Number of clear days.						
California—Continued.																					
Indian Wells.	Kern.	2,500	35	70.4	-2.1	100	27	43	15	44	0.00	-0.07	0.00	0	0	25	5	0	I. D. McCoy.		
Indio.	Riverside.	-20	35	70.4	-2.1	100	27	43	15	44	0.00	-0.07	0.00	0	0	25	5	0	F. N. Johnson.		
Inskip.	Butte.	4,975	6	45.4	+ 2.1	76	24	24	30	30	6.52	-1.16	10	5	9	16	2	6	Cal. Gas & Electric Co.		
Ione**.	Amador.	287	35	60.8	+ 2.1	90	10	38	2	1	-0.03	-1.02	0.64	0	4	22	2	6	Southern Pacific Co.		
Jamestown.	Tuolumne.	1,471	10																Sierra Railway Co.		
Kennett.	Shasta.	730	1	55.6		88	24	32	30	39	4.28	-1.01	1.45	0.41	0	9	7	19	4	C. H. Kremers.	
Kentfield.	Marin.	65	25																Miss M. E. Parsons.		
King City.	Monterey.	333	26	61.8	+ 5.3	99	25	28	16	57	T.	-0.51	T.	0	0	28	0	2	Southern Pacific Co.		
Lake Eleanor.	Tuolumne.	4,700	3	43.3		74	25	21	15	43	2.52	-0.90	0.90	9.5	11	15	3	12	O. J. Todd.		
La Porte.	Plumas.	5,000	19	40.2	-2.0	66	25	16	30	30	5.75	+ 0.48	0.76	41.2	14	11	12	7	C. W. Hendel.		
Le Grand.	Mered.	255	13	57.6	+ 0.2	93	25	30	29	43	0.78	-0.35	0.35	0	0	24	0	6	Santa Fe Co.		
Lemon Cove.	Tulare.	600	18	62.4	0.0	96	24	30	2	52	1.35	-0.22	0.75	0	3	17	13	0	W. R. Park.		
Lick Observatory.	Santa Clara.	4,209	24	43.8	-2.6	69	24	33	30	46	0.54	-0.61	0.22	0	0	24	0	6	The Director.		
Livermore.	Alameda.	485	42	57.2	+ 0.3	92	24	24	15	52	T.	-1.87	0.35	0	0	13	8	9	E. G. Still.		
Lone Pine.	Inyo.	2,725	8	53.7		87	25	24	15	52	T.	-0.61	0.22	0	0	26	4	0	G. F. Marsh.		
Long Valley.	Lassen.	4,400	4																A. G. Evans.		
Los Angeles.	Los Angeles.	293	36	59.8	+ 2.2	88	11	45	15	34	0.35	-1.01	0.33	0	3	14	12	4	U. S. Weather Bureau.		
Los Banos**.	Merced.	121	26	66.3	+ 3.7	90	26	25	30	30	0.35	-0.21	0.28	0	3	17	0	13	Southern Pacific Co.		
Los Gatos.	Santa Clara.	600	26	56.2	-0.1	88	24	34	28	43	0.40	-1.63	0.30	0	3	14	8	8	F. H. McCullagh.		
McCloud.	Siskiyou.	3,410	3	44.4		79	25	20	67	45	2.94	-0.99	1.00	2.0	10	14	11	5	F. F. Spencer.		
Macdoel.	do.	4,528	8	37.0		64	25	18	8	36	0.90	-0.22	3.5	10	5	6	25	5	Butte Valley Land Co.		
Madelaine.	Lassen.	5,270	4	41.0		72	25	12	28	41	0.73	-0.22	0.22	5.0	6	12	12	12	J. H. Williams.		
Magalia.	Butte.	2,321	9	51.2		86	25	30	57	39	4.88	-2.15	0	0	0	28	2	0	Union Oil Co.		
Mammoth Tank.	Imperial.	257	35	75.4	0.0	101	27	53	15	34	0.00	-0.09	0.00	0	0	18	10	2	Southern Pacific Co.		
Maricopa.	Kern.	640	2	61.0		95	25	37	14	40	0.47	-0.24	0.24	0	3	16	0	14	Do.		
Marysville.	Yuba.	67	42	58.8	-3.2	90	24	35	71	41	0.83	-0.68	0.55	0	4	16	0	14	E. A. Palmer.		
Mecca.	Riverside.	-185	7	67.6		98	27	41	15	45	0.00	-0.00	0.00	0	0	23	7	0	Southern Pacific Co.		
Menlo Park**.	San Mateo.	64	35	57.2	+ 0.1	70	24	50	17	57	0.71	-0.61	0.56	0	2	21	0	9	Santa Fe Co.		
Merced.	do.	173	39	59.0	-1.0	90	20	127	36	45	0.55	-0.42	0.30	0	4	16	10	4	John C. Knecht.		
Middlewater.	Kern.	803	2	69.8		94	26	36	2	44	0.09	-0.09	0.09	0	1	22	7	1	Cal. Gas & Elec. Co.		
Milton (near).	Amador.	2,500	6	49.3		76	25	29	30	35	3.03	-0.87	1.0	1.0	11	15	8	7	J. H. Southwick.		
Modesto**.	Stanislaus.	90	41	54.7	-7.5	87	26	47	17	47	0.45	-0.43	0.37	0	2	27	2	1	Southern Pacific Co.		
Mojave.	Kern.	2,731	36	58.3	-1.4	90	25	39	14	50	0.00	-0.21	0.00	0	0	25	3	2	Do.		
Mokelumne Hill.	Calaveras.	1,550	20	56.1	+ 1.4	84	25	33	30	28	1.77	-1.02	0.86	0	6	14	4	12	C. E. Prindle.		
Mono Ranch.	Ventura.	3,210	7	49.7		82	26	26	15	42	0.58	-0.59	0.42	0	2	25	1	4	Herbert Lathrop.		
Montague.	Siskiyou.	2,450	25	46.4	-6.9	82	24	18	6	45	0.84	+ 0.27	0.34	0.5	8	7	12	11	I. E. Deboy.		
Monterey**.	Monterey.	15	48	58.2	+ 2.4	78	25	46	13	57	0.65	-0.73	0.30	0	3	22	7	1	Southern Pacific Co.		
Monterio.	Kern.	4,500	14	49.4	-4.1	74	26	30	7	34	0.55	-1.27	0.50	0	2	18	10	2	U. S. Weather Bureau.		
Mount Tamalpais.	Marin.	2,375	14	48.4	-1.1	77	24	34	28	31	1.38	-0.62	0.64	T.	10	17	8	5	Alex. Hull.		
Napa City.	Napa.	20	36	53.3	-1.8	88	23	29	1	50	1.08	-0.88	0.70	0	2	14	15	1	Do.		
Napa (S. H.).	do.	60	35	56.6	-0.2	87	23	40	28	33	0.94	-0.97	0.38	0	6	13	4	13	A. R. Edgar.		
Needles.	San Bernardino.	477	21	70.2	-1.5	95	27	47	23	34	0.02	-0.06	0.02	0	1	28	2	0	Santa Fe Co.		
Nellie.	San Diego.	5,350	4	48.6		74	27	26	14	29	1.95	-1.25	2.0	3	26	1	3	T. O. Bailey.			
Nevada City.	Nevada.	2,850	21	48.8	-1.7	82	26	24	30	46	3.21	-1.29	0.63	0.5	12	14	8	8	S. W. Marsh.		
Newhall **.	Los Angeles.	1,200	36	64.3	+ 5.4	94	29	48	15	50	0.11	-0.93	0.06	0	2	13	4	13	Southern Pacific Co.		
Newman.	Stanislaus.	91	24	64.0	+ 1.9	98	25	31	27	57	0.94	+ 0.24	0.51	0	4	21	9	0	E. S. Wangenheim.		
North Bloomfield.	Nevada.	3,214	16	55.8	+ 4.5	77	27	44	41	26	3.00	-1.49	0.90	0	7	13	10	7	J. R. McIntosh.		
North Fork.	Madera.	3,000	9																U. S. Forest Service.		
Oakdale **.	Stanislaus.	156	19	63.3	+ 5.7	94	24	44	29	50	0.17	-0.97	0.14	0	3	24	0	6	Southern Pacific Co.		
Oak Grove.	do.	2,751	3	54.6		89	26	23	15	50	0.19	-0.11	0	2	18	11	1	B. L. Johnson.			
Oakland.	Alameda.	36	37	56.6	+ 1.2	84	24	42	67	32	0.41	-1.15	0.12	0	8	14	11	5	Chabot Observatory.		
Oceanside.	San Diego.	60	3	57.0		76	10	40	15	28	0.24	-0.20	0.20	0	2	24	5	1	H. D. Brodie.		
Ojai Valley.	Ventura.	900	7	56.8		90	26	31	15	50	0.57	-0.50	0.30	0	3	23	3	4	W. H. Duncan.		
Orland.	Glen.	254	31	58.4	-5.0	91	25	34	29	41	1.00	-0.24	0.43	0	6	20	7	3	U. S. Reclamation Service.		
Orleans.	Humboldt.	520	10	58.0	-3.4	94	25	36	28	50	4.06	+ 1.42	0.97	0	15	10	0	20	F. T. Hale.		
Oroville (near).	Butte.	250	29	58.3	-1.2	88	23	35	7	42	1.44	-0.54	0.60	0	5	13	2	15	E. D. Fairchild.		
Palm Springs **.	Riverside.	584	24	65.5	6.9	100	27	50	11	45	0.25	-1.29	0.25	0	1	15	10	5	Western Pacific Co.		
Passadena.	Los Angeles.	827	23	58.8	-1.3	92	26	37	77	43	0.92	+ 0.61	0.42	0	4	23	5	2	Southern Pacific Co.		
Paso Robles.	San Luis Obispo.	800	26	55.7	-2.1	93	26	28	87	57	0.31	-0.34	0.14	0	4	21	9	0	E. D. Sorver.		
Peachland.	Sonoma.	190	17	53.9	-2.2	88	24	32	77	43	1.78	-0.21	0.81	0	7	19	5	6	Dr. F. W. Sawyer.		
Petaluma.	do.	1,875	24	52.8		85	24	33	25	46	1.01	-0.36	0.36	0	7	11	17	2	E. H. Parnell.		
Placerville.	El Dorado.	1,857	24	52.5	+ 0.3	78	17	32	7	35	2.39	-1.86	0.75	0	8				John Landis.		
Point Lobos.	San Francisco.	250	20	50.8	-0.3	72	24	43	10	21	1.39	+ 0.05	0.55	0	11	12	12	6	A. E. May.		
Point Reyes.	Marin.	490	21	58.3		94	26	31	15	55	0.34	-0.15	0.15	0	5	13	6	11	John Hyslop.		
Pomona.	Los Angeles.																	U. S. Weather Bureau.			
Porterville.	Tulare.	464	24															J. E. Adamson.			
Quincy.	Plumas.	3,400	18	46.4	-1.6	77	25	21	7	49	3.25	-0.76	0.80	2.0	10	14	8	8	Leslie McAllif.		
Red Bluff.	Tehama.	307</td																			

TABLE 1.—*Climatological data for April, 1913. District No. 11—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.								Precipitation, in inches.								Observers.	
				Mean.				Departure from the normal.				Total.				Departure from the normal.					
				Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of overcast days.	Do.	Do.	Do.	Do.		
<i>California—Continued.</i>																					
Santa Rosa	Sonoma	181	24	53.2	- 2.5	88	23	29	28	46	1.91	+ 0.27	1.25	0	6	16	0	14	s.	Southern Pacific Co.	
Seima **	Fresno	311	27	62.3	0.0	92	27†	44	14	..	1.19	+ 0.50	0.96	0	2	28	0	2	w.	Do.	
Seven Oaks	San Bernardino	5,000	3	45.0	..	71	25	21	15	38	0.60	..	0.30	1.4	3	19	11	0	s.	M. Lewis.	
Sierra Madre	Los Angeles	1,400	16	59.3	- 0.1	89	39	39	1	41	0.78	- 0.63	0.59	0	4	20	4	6	sw.	Mrs. A. E. Gregory.	
Sieraville	Sierra	5,000	3	43.2	..	71	23†	8	30	45	3.00	..	1.00	T.	6	16	6	8	n.	C. D. Johnson.	
Sisson	Siskiyou	3,555	24	44.8	- 2.4	75	25	26	2†	43	2.55	+ 0.09	0.26	4.0	7	15	5	10	n.	Southern Pacific Co.	
Soledad **	Monterey	188	39	66.9	+ 9.6	79	19	54	7	..	0.00	- 0.60	0.00	0	0	21	3	6	n.	Do.	
Sonora	Tuolumne	1,825	25	54.8	..	82	25†	33	30	35	1.74	- 0.57	0.58	0	5	16	10	4	nw.	Chas. P. Jones.	
Southeast Farallon	San Francisco	30	10	51.2	- 0.8	61	20	44	10	10	0.86	- 0.15	0.35	0	6	13	10	7	nw.	U. S. Weather Bureau.	
Springville	Tulare	4,000	6	48.9	..	83	25	15	5	47	0.17	..	0.08	T.	3	22	0	8	n.	D. L. Wishon.	
Squirrel Inn	San Bernardino	5,280	3	40.6	..	72	26	26	15	28	1.13	..	0.97	1.0	4	21	4	5	s.	A. D. Frantz.	
Stanwood	Butte	2,140	9	46.6	..	64	23†	30	23†	34	5.97	..	1.42	0	8	6	16	8	n.	Cal. Gas & Elec. Co.	
Stirling City	do	3,525	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	n.	Butte Co. R. R. Co.
Stockton (S. H.)	San Joaquin	23	42	59.0	+ 0.1	90	25	37	30	39	0.35	- 0.76	0.16	0	7	17	11	2	nw.	State Hospital.	
Storey	Madera	296	13	57.4	+ 0.6	90	25	32	15	45	1.60	+ 0.86	0.85	0	2	24	0	6	n.	Santa Fe Co.	
Suisun **	Solano	20	33	59.9	0.0	94	23	38	2	..	0.81	- 0.48	0.40	0	5	20	2	8	sw.	Southern Pacific Co.	
Sulphur Banks	Lake	1,350	1	53.4	..	86	25	19	2	43	1.24	..	0.75	0	4	14	13	3	w.	L. S. Lorenzen.	
Summit	Placer	7,017	49	34.6	- 0.9	57	25	10	6	26	1.90	- 2.70	0.50	19.0	11	13	0	17	sw.	Southern Pacific Co.	
Susanville	Lassen	4,175	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	c. m.	C. M. Penry.
Tamarack	Alpine	8,000	7	25.0	..	48	25	2	24	44	0.76	- 2.57	0.36	8.0	3	18	4	8	sw.	Cal. Gas & Elec. Co.	
Tehachapi **	Kern	3,964	36	57.5	+ 7.3	76	11	35	15†	..	0.25	- 1.00	0.15	0	2	..	..	..	n.	Southern Pacific Co.
Tehama	Tehama	220	42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	do.	S. E. Bailey.
Tejon Rancho	Kern	1,500	10	59.2	+ 1.7	86	11†	38	30	36	0.63	- 0.54	0.50	0	2	..	..	..	sw.	J. H. Pierce.
Three Rivers	Tulare	870	3	57.9	..	92	25†	32	15	47	1.22	- 0.83	0.83	0	3	15	11	4	ne.	Southern Pacific Co.	
Towle	Placer	3,704	27	46.6	- 4.6	72	11†	22	2	33	7.88	+ 4.61	3.00	11.0	10	18	4	8	do.	Do.	
Tracy **	San Joaquin	64	33	55.4	- 5.5	90	25	36	7	..	0.95	+ 0.09	0.43	0	3	..	..	..	nw.	Dr. Geo. McCowen.
Ukiah	Mendocino	620	20	54.0	- 0.7	92	24	29	28	51	1.96	- 0.49	0.72	0	9	9	13	8	nw.	C. M. Hammond.	
Upper Lake	Lake	1,350	28	51.2	- 3.6	85	24†	28	30	44	1.71	+ 0.01	0.72	0	8	15	6	9	nw.	G. O. Coburn.	
Vacaville	Solano	175	25	57.6	- 1.2	98	24	30	28	46	0.49	- 1.48	0.24	0	4	12	15	3	sw.	Southern Pacific Co.	
Valley Springs **	Calaveras	673	24	61.1	+ 0.2	93	25	43	7	..	0.96	- 0.93	0.30	0	6	17	5	8	nw.	Santa Fe Co.	
Visalia	Tulare	334	25	52.2	- 6.6	81	6	26	10	53	0.86	+ 0.10	0.56	0	2	30	0	0	n.	Mrs. F. S. Sandford.	
Warner Springs	San Diego	3,165	5	53.4	..	88	25	26	14	44	0.29	..	0.10	0	4	26	4	0	nw.	Santa Fe Co.	
Wasco	Kern	336	13	62.0	+ 2.4	93*	23†	31*	13	59*	0.00	- 0.51	0.00	0	0	30	0	0	n.	Spreckels Sugar Co.	
Watsonville	Santa Cruz	23	17	55.3	- 2.2	88	10†	27	28	53	0.27	- 0.80	0.03	0	5	17	13	0	w.	U. S. Forest Service.	
Weaverville	Trinity	2,162	1	49.1	..	83	24†	25	30	49	2.83	- 0.48	0.68	T.	11	11	7	12	sw.	M. E. Lathrop.	
Weitchpec	Humboldt	1,700	3	47.5	..	81	24	28	28	38	6.20	..	1.39	3.5	15	11	10	9	n.	Southern Pacific Co.	
Westley **	Stanislaus	90	24	65.7	+ 1.7	92	25	45	16	..	0.69	+ 0.02	0.30	0	4	20	0	10	n.	Wm. Lumbard.	
Wheatland	Yuba	84	26	57.4	- 1.0	87	25	34	30	36	1.08	- 0.32	0.59	0	6	13	4	13	n.	E. C. Mills.	
Willows	Glenn	136	34	58.8	- 1.5	90	24†	34	30	41	0.76	- 0.44	0.36	0	5	15	8	7	se.	S. J. Walker.	
Yorba Linda	Orange	59,04	..	92d	11	30d	18	49d	0.53	..	0.23	..	0	3	..	..	..	w.	J. P. Kelly.	
Yosemite	Mariposa	3,945	9	44.8	..	85	25†	12	30	60	1.88	..	0.65	2.2	10	11	4	15	s.		

*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1913. District No. 11, California.*

Stations.	Watershed.	Day of month.																													Total.								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30								
<i>Oregon.</i>																																							
Klamath Agency	Klamath																																0.60						
Klamath Falls	do.	.10	.05	T.	T.	.10																										.12	.03	1.05					
Lakeview	Pitt.	.20	.04	.01		.01																										.02	.05	0.69					
Merrill	Int. drainage	.07																																					
Vistillas	Pitt.																																						
Yonna	Int. drainage	.16	.18			.16																																	
<i>California.</i>																																							
Aguanga	Coast	.50	.16	.02		.03																															0.65		
Alturas	Sacramento	.50	.16	.02		.03																															2.08		
Angels Camp	San Joaquin					.08																															1.30		
Angiola	do																																					0.37	
Antelope Valley	do																																					0.07	
Antioch	do																																					0.38	
Apitos	Coast	.10	.08			.06																															0.96		
Arrowhead Springs	do																																					1.43	
Auburn	Sacramento	.02	T.	.76	.30																																0.10		
Avalon	Ocean																																					0.63	
Azusa	Coast	T.																																				0.00	
Bagdad	Desert																																					T.	
Bakersfield	San Joaquin																																					0.00	
Barstow	Desert																																					0.00	
Rear River	San Joaquin																																					0.84	
Bear Valley	do	.13																																				0.58	
Bear Valley Dam	do																																					0.58	
Beaumont	do	.05																																				0.44	
Beaumont (near)	do	.12																																				0.55	
Belotta	do																																					0.90	
Ben Lomond	Coast	.20	.13	.33		.10	.04																													T.			
Berkeley	do																																					0.57	
Betteravia	do	T.																																				0.48	
Biggs	Sacramento					.55	.30																													1.32			
Bishop	Owens																																					20	
Bishop Creek	do	.30																																				0.50	
Blocksburg	Coast																																						30
Blue Cannon	Sacramento	.10	.35	1.03	.60	.13																															5.87		
Blythe	Desert																																					0.67	
Boulder Creek	Coast																																					36	
Brownman's Dam	Sacramento	.20	.12	.60	.50	.61																														6.99			
Branscomb	Coast					.62	1.76	.52	1.43																										0.15				
Brawley	Desert																																					T.	
Burney	Sacramento	.26	T.	T.	.20	.64																															25		
Butte Valley	do																																					1.73	
Cahuilla	Coast					.07																																0.57	
Calexico	Desert																																						0.00
Caliente	San Joaquin					.10	.05	1.00	.47																										0.08				
Calistoga	Coast					.13																															0.22		
Campbell	do																																					0.33	
Camptonville (near)	Sacramento	.02	.16	.74	.79	.66																														28			
Cedarville	Mountain Lakes	.10	.14	T.		.12																															0.09		
Chester	Sacramento	.02	.15	.40	.20	.50																														2.38			
Chico	do			.36	.03	.05																														1.16			
Chico (near)	T.			.39	T.	.43																														0.43			
China Flat	Coast	.22	.13	.61	1.08																															3.72			
Chino	do																																					0.30	
Cisco	Sacramento			.20	.10	.30	.30																													2.00			
Clemont	Coast			.01																																	0.25		
Cloverdale	do																																					0.65	
Coalinga	San Joaquin																																						

TABLE 2.—*Daily precipitation for April, 1913. District No. 11—Continued.*

TABLE 2.—*Daily precipitation for April, 1913. District No. 11—Continued.*

Stations.	Watershed.	Day of month.																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total.		
California—Contd.																																		
Nevada City	Sacramento	T.	.08	.37	.43	.61																											11 .02	
Nevis	do	T.	.10	.09	.38	.14	.64																									24 .10	2.76	
Newhall	Coast																																0.11	
Newman	San Joaquin																																0.94	
North Bloomfield	Sacramento																																3.60	
North Fork	San Joaquin																																	
North Lakeport	Coast																																10 .05	
Oakdale	San Joaquin																																0.17	
Oak Grove	Coast																																0.19	
Oakland	do																																0.41	
Oakville	do																																13 .32	
Oceanside																																	0.24	
Ojai Valley	do																																0.57	
Orland	Sacramento																																1.00	
Orleans	Klamath																																4.06	
Oroville (near)	Sacramento																																21 .T.	
Ozena	Coast																																1.44	
Palermo	Sacramento																																0.25	
Palm Springs	Desert																																0.00	
Parkfield	Coast																																0.56	
Pasadena	do																																0.92	
Paso Robles	do																																0.31	
Penchland	do																																1.78	
Petaluma	do																																20 .T.	
Phoenix Dam	San Joaquin																																1.01	
Pilot Creek	Sacramento	*	*	*	*	*																											38 .T.	
Pinchot	Coast																																4.39	
Pine Crest	do																																1.01	
Placerville	Sacramento																																2.39	
Point Lobos	Coast																																0.13	
Point Reyes	do																																0.39	
Pomona	do																																0.34	
Porterville	San Joaquin																																	
Friest Valley	Coast																																	0.16
Quincy	Sacramento																																10 .15	
Red Bluff	do																																2.35	
Redding	do																																1.86	
Redlands	Coast																																2.66	
Reedley	San Joaquin																																0.50	
Reppressa	Sacramento																																0.98	
Rialto (near)	Coast																																1.14	
Rio Vista	Sacramento																																1.09	
Riverside	Coast																																0.33	
Rocklin	Sacramento																																0.43	
Rohnerville	Coast																																1.20	
Ruth	do																																2.90	
Sacramento	Sacramento																																5.67	
Saint Helena	Coast																																0.53	
Salinas	do																																11 .46	
San Bernardino	do																																0.43	
San Diego	do																																0.66	
San Francisco	do																																0.08	
San Jacinto	do																																0.61	
San Jose	do																																0.38	
San Luis Obispo	do																																0.52	
San Mateo	do																																0.40	
San Miguel	do																																0.35	
San Miguel Island	Ocean																																1.41	
Sanger	San Joaquin																																0.62	
Santa Ana River	Coast																																1.04	
Santa Barbara	do																																0.61	
Santa Clara	do																																0.58	
Santa Cruz	do																																0.19	
Santa Margarita	do																																0.11	
Santa Monica	do																																1.91	
Santa Rosa	do																																0.70	
Sausalito	San Joaquin																																1.19	
Seven Oaks	Coast																																0.60	
Shively	do																																39 .41	
Sierra Madre	do																																4.17	
Sierraville	Mountain Lakes																																3.00	
Siskson	Sacramento																																2.55	
Soledad	Coast																																0.00	
Somora	San Joaquin																																1.74	
Southeast Farallon	Ocean					</td																												

TABLE 2.—*Daily precipitation for April, 1913. District No. 11—Continued.*

Stations.	Watershed.	Day of month.																													Total.			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
<i>California—Contd.</i>																																		
Vacaville.....	Sacramento.....	T.	.15	.24																													0.49	
Valley Springs.....	San Joaquin.....	.02		T.	.09	.30																										0.96		
Visalia.....	do.....																																0.86	
Warner Springs.....	Coast.....	.03																															0.29	
Wasco.....	San Joaquin.....																																0.00	
Watsonville.....	Coast.....	.03		.04	.09																												0.27	
Weaverville.....	T. ....	.03	.66	.36	.23		T.	.02																									2.83
Weitchpec.....	Klamath.....	.61	.40	.73	1.39		.12	.12																								6.20		
West Branch.....	Sacramento.....	.08	.12	.65	.88	.87																											4.95	
Westley.....	San Joaquin.....			.04																													0.69	
West Point.....	do.....	.03	.11		.35	.39	.39																										2.76	
West Saticoy.....	Coast.....																																	0.20
Wheatland.....	Sacramento.....			.59	.08	.20																											1.08	
Willows.....	do.....	T.36	.06	.24																													0.76
Yorba Linda.....	Coast.....																																	0.53
Yosemite.....	San Joaquin.....	.40	.01	T.65	.01																											.02	1.88

* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

|| Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures for April, 1913. District No. 11, California.

Date.	Lakeview, Oreg.		Alturas.		Barstow.		Bransecomb.		Brawley.		Colusa.		Eureka.		Fresno.		Independ- ence.		Los An- geles.		Mount Ta- malpais.		Nevada City.		Porter- ville.		Red Bluff.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	48	28	61	32	83	51	64	39	87	56	74	53	52	41	72	47	74	46	62	52	53	37	56	43	.....	70	58
2....	37	23	47	25	66	48	50	42	74	58	66	50	52	38	62	42	62	38	67	49	46	34	54	32	.....	59	44
3....	40	26	44	30	73	40	54	43	78	47	56	40	61	48	70	39	59	31	67	48	46	39	50	35	.....	52	47
4....	45	34	53	36	80	46	79	43	84	42	66	52	53	46	78	47	68	33	76	51	46	41	60	42	.....	61	52
5....	43	27	50	31	85	51	51	37	87	50	62	47	54	42	64	43	70	43	69	51	48	37	53	35	.....	60	47
6....	44	18	54	22	73	46	57	29	82	60	64	39	51	39	68	38	59	34	63	50	48	36	60	25	.....	64	40
7....	49	20	55	22	81	48	56	27	80	49	67	37	55	37	70	41	62	34	64	46	51	38	63	26	.....	64	39
8....	49	30	55	34	77	46	65	35	82	56	71	45	52	46	73	41	68	36	65	46	58	41	64	32	.....	71	48
9....	56	25	67	25	79	45	70	38	85	45	77	45	50	45	80	48	68	40	76	49	66	51	72	34	.....	79	49
10....	66	28	73	28	80	38	77	41	86	61	78	50	60	42	86	52	70	35	87	53	69	53	78	37	.....	78	47
11....	64	34	71	31	81	40	65	41	89	54	81	54	60	45	89	56	72	42	88	58	55	40	77	36	.....	77	48
12....	63	39	68	42	87	41	56	41	90	52	72	46	51	45	84	43	72	42	73	52	45	39	68	31	.....	66	48
13....	56	33	59	35	77	40	51	34	90	49	62	44	54	43	60	47	66	49	64	52	49	37	44	36	.....	60	46
14....	51	31	52	35	74	44	43	30	81	46	56	42	49	44	54	43	52	36	58	48	45	36	41	30	.....	49	46
15....	40	30	53	31	78	40	54	33	76	42	63	42	61	44	65	40	60	27	66	45	48	37	58	32	.....	60	45
16....	58	24	65	28	75	42	57	34	85	50	69	48	60	44	72	52	66	40	62	45	46	40	63	36	.....	66	48
17....	63	34	67	31	75	45	54	37	80	51	68	49	54	42	69	49	60	40	63	46	52	40	58	36	.....	62	46
18....	58	32	62	34	71	43	56	35	75	47	70	50	61	48	70	50	62	32	62	49	49	41	48	39	.....	60	50
19....	55	33	62	33	76	40	59	36	81	48	70	43	63	46	74	45	68	35	65	46	55	40	65	30	.....	68	44
20....	64	33	70	34	77	41	67	34	80	47	76	44	56	43	73	48	66	41	63	53	60	42	67	37	.....	74	50
21....	58	32	67	31	78	44	69	33	77	55	77	44	56	48	79	48	70	38	71	50	62	45	72	35	.....	77	50
22....	48	23	58	31	85	46	80	38	78	52	77	52	53	45	81	52	78	42	67	52	67	50	78	35	.....	74	56
23....	59	23	64	29	81	48	82	38	82	56	81	55	56	40	83	49	75	44	70	55	74	55	80	34	.....	80	56
24....	67	31	73	31	84	46	87	39	86	47	87	57	68	44	89	56	78	42	79	53	77	62	79	39	.....	86	60
25....	74	36	76	35	87	48	84	38	93	53	86	51	55	46	92	58	78	48	82	51	75	61	81	40	.....	84	54
26....	64	35	71	38	88	43	80	37	96	53	86	66	56	42	94	58	84	46	86	53	70	39	82	41	.....	82	52
27....	57	30	64	36	85	46	75	34	96	51	75	60	51	42	72	51	80	48	75	49	49	36	58	43	.....	65	50
28....	46	26	52	24	80	43	74	25	94	58	69	39	52	38	71	44	76	43	68	52	48	34	58	25	.....	64	45
29....	39	22	46	26	74	45	47	30	88	59	65	41	50	41	66	44	76	48	64	51	47	35	54	33	.....	58	44
30....	38	23	45	18	65	41	55	29	83	52	65	35	51	42	66	40	58	33	62	50	49	35	59	24	.....	62	39
Mns..	53.3	28.8	60.1	30.6	78.5	44.2	63.9	35.6	84.1	51.5	71.2	47.3	55.4	43.2	74.2	47.2	68.6	39.5	69.4	50.2	55.1	41.7	63.3	34.4	.....	67.7	48.3

Date.	Redlands.		Sacra- mento.		San Diego.		San Francisco.		San Jose.		San Luis Obisp.		Santa Barbara.		Santa Rosa.		Sisson.		Stockton.		Summit.		Susan- ville.		Yosemite.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	62	48	67	44	60	54	53	47	62	43	55	43	56	49	67	39	62	38	70	53	53	35	.....	78	28
2....	65	48	63	43	59	49	54	46	58	43	58	38	70	44	60	35	55	26	60	45	35	20	.....	75	26
3....	72	40	54	47	64	46	46	47	62	43	66	45	68	40	60	44	47	33	62	46	34	22	.....	61	14
4....	80	43	65	50	69	49	62	53	71	51	67	45	70	45	62	45	48	32	72	47	40	26	.....	63	17
5....	82	46	63	48	64	51	57	49	61	46	62	42	74	46	60	42	46	29	63	50	39	23	.....	65	23
6....	62	40	64	45	62	51	57	46	61	43	67	44	67	46	64	33	48	30	64	41	35	10	.....	60	17
7....	66	38	55	39	61	49	56	46	63	35	61	44	67	46	60	34	54	33	66	42	37	13	.....	63	14
8....	69	38	69	48	62	51	60	49	65	45	62	36	62	41	69	48	55	32	74	46	40	29	.....	70	17
9....	85	41	77	48	64	48	72	47	82	44	77	46	80	45	73	37	64	30	77	46	44	20	.....	71	19
10....	84	45	83	50	78	53	76	47	87	44	82	44	72	43	79	37	65	34	84	45	50	30	.....	77	22
11....	86	45	76	49	81	54	55	46	68	44	70	38	63	40	62	48	41	80	50	52	30	.....	80	20	
12....	82	45	62	45	63	53	56	49	68	44	64	46	58	40	58	34	66	44	53	32	47	30	.....	76	17
13....	63	38	58	47	61	53	58	48	59	45	68	44	55	42	60	39	55	32	66	47	47	30	.....	68	22
14....	61	42	57	47	60	51	55	47	60	43	58	40	60	39	57	38	45	32	60	47	47	25	.....	45	22
15....	70	33	64	43	62	44	61	48	66</td																	